

DOCUMENT RESUME

ED 082 132

CS 000 722

AUTHOR Scheier, Elaine; And Others
TITLE A Summary of the Evaluation of the Educational Developmental Laboratories/American Institute of Banking High School Equivalency Program for Bank Trainees.
INSTITUTION Educational Developmental Labs., Inc., New York, N.Y. Research Dept.
REPORT NO EDL-RIR-5
PUB DATE Mar 72
NOTE 29p.

EDRS PRICE MF-\$0.65 HC-\$3.29
DESCRIPTORS *Adult Education Programs; Adult Students; *Adult Vocational Education; Banking; Critical Reading; *Disadvantaged Groups; *Individualized Instruction; Mathematics; Reading Improvement; *Reading Instruction; Social Studies
IDENTIFIERS GED; *General Educational Development Tests

ABSTRACT

The New York Chapter of the American Institute of Banking (AIB) is a sponsor of the Joint Bank Hiring and Education Program for the Disadvantaged (HEP), the purpose of which is to hire and train undereducated adults and provide education that will enable the trainees to compete successfully in the banking industry. Educational Development Laboratories (EDL)/McGraw-Hill and AIB, New York Chapter, entered into an agreement in which EDL/McGraw-Hill agreed to provide the teaching staff, curriculum, instructional materials, and specialized equipment needed for trainees to develop skills in reading, communication, mathematics, social studies, and science. The educational objective of this total program was the successful completion by the students of the General Educational Development Tests (GED). Teachers went through a four-week training program to develop: (1) an understanding of a comprehensive laboratory approach to GED instruction, (2) expertise with media, (3) an understanding of the value of a multimedia approach to educating the disadvantaged, (4) expertise in individualizing instruction, and (5) techniques in critical reading instruction. A total of 485 students were accepted for the program, and 372 completed it. The students in responding to a questionnaire, in general agreed that the program helped them. (WR)

ED 082132

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

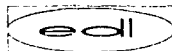
Research and Information Report No. 5
EDL Research Department, March 1972

A Summary of the Evaluation of the Educational Developmental Laboratories/ American Institute of Banking High School Equivalency Program for Bank Trainees

Elaine Scheier, M.S.
Research Coordinator

Leona M. Kosmac, M.S.
Associate Research Coordinator

Donald R. Senter, Ed.D.
Research Director



Educational Developmental Laboratories

A DIVISION OF MCGRAW HILL BOOK COMPANY

NEW YORK LONDON SYDNEY TORONTO

Copyright © 1972 McGraw-Hill, Inc.

All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publishers.

"PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY

McGraw-Hill, Inc.

TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER."

CONTENTS

LIST OF TABLES	iii
LIST OF FIGURES	iv
INTRODUCTION	1
EDL/AIB PROGRAM STAFF	3
TEACHER TRAINING	3
SCHEDULE OF INSTRUCTION	4
TRAINING PERIODS I, II, AND III	
Description of the Sample	5
Methods and Instruments of Evaluation	12
Results of Statistical Analyses	13
Subjective Evaluation	18
Summary and Conclusions	20
APPENDIX	
Instructional Materials Used in the EDL/AIB Program	21

LIST OF TABLES

Table		Page
I.	Comparison of Distribution of Students by Disposition for Training Periods I, II, and III	5
II.	Comparison of Reasons for Students Leaving the Program for Training Periods I, II, and III	6
III.	Comparison of Attendance and Tardiness for Training Periods I, II, and III	6
IV.	Comparison of Distribution of Students by Age for Training Periods I, II, and III	7
V.	Comparison of Distribution of Students by Sex for Training Periods I, II, and III	7
VI.	Comparison of Distribution of Students by Marital Status for Training Periods I, II, and III	7
VII.	Comparison of Distribution of Students by Children at Home for Training Periods I, II, and III	8
VIII.	Comparison of Distribution of Students by Citizenship for Training Periods I, II, and III	8
IX.	Comparison of Distribution of Students by Race for Training Periods I, II, and III	8
X.	Comparison of Distribution of Students by Location of Major School Attendance for Training Periods I, II, and III	9
XI.	Comparison of Distribution of Students Ever Gainfully Employed for Training Periods I, II, and III	9
XII.	Comparison of Distribution of Students by Language Spoken at Home for Training Periods I, II, and III	10
XIII.	Comparison of Distribution of Students by Years of Formal Schooling for Training Periods I, II, and III	10

Table		Page
XIV.	Comparison of Distribution of Students by Year of Most Recent Employment for Training Periods I, II, and III	11
XV.	Comparison of Distribution of Students by Type of Work Employed in for Longest Period of Time for Training Periods I, II, and III.	11
XVI.	Testing Schedule for Training Periods I, II, and III	12
XVII.	Comparison of Mean Scores Attained on the New York State Minimum Competency Test and the General Educational Development Tests by AIB Students for Training Periods I, II, and III	14
XVIII.	Comparison of Numbers of Students Who Passed and Failed the GED Examination for Training Periods I, II, and III	15
XIX.	Frequency Distributions of Total GED Scores for Training Periods I, II, and III	15
XX.	Per Cent of Students Passing or Failing the GED Based on Performance on the New York State Minimum Competency Test	17
XXI.	Per Cent of Students Passing the GED Based on Performance on the Pretest California Achievement Tests Reading Subtest	18
XXII.	Comparison of Students' Opinions of How the Program Helped Them Most for Training Periods I and III	19
XXIII.	Comparison of Students' Future Educational Plans for Training Periods I and III	19

LIST OF FIGURES

Figure		Page
I	Frequency Distributions of Total GED Scores for Training Periods I, II, and III	16

INTRODUCTION

The American Institute of Banking is a national organization with regional chapters which offers various services to its member banks, one of which is the provision of numerous training programs for bank employees. The New York Chapter, representing a consortium of ten New York City banks, is a sponsor of the Joint Bank Hiring and Education Program for the Disadvantaged (HEP) whose purpose is to hire and train undereducated adults in numbers that the banks can absorb, and at the same time provide education that will enable the trainees to compete successfully in the banking industry. The prime goal of the program is to help those with unsuccessful traditional school experience achieve high school equivalency. The program is jointly funded by the participating banks and the Department of Labor's Job Opportunities in the Business Sector program.

There were two previous Joint Bank Hiring and Education Programs sponsored by the American Institute of Banking. When HEP was initiated in 1968, it was the first industrywide consortium formed for the purpose of providing remedial education to men and women from culturally deprived minority groups and training them to assume banking jobs.

EDL/McGraw-Hill and the American Institute of Banking, New York Chapter, entered into an agreement in September 1970, in which EDL/McGraw-Hill agreed to provide the teaching staff, curriculum, instructional material, and specialized equipment needed for trainees to develop skills in reading, communication skills, mathematics, social studies, and science. The educational objective of this total program was the successful completion by the students of the *General Educational Development Tests* (GED). The American Institute of Banking agreed to provide classroom facilities, administrative and counseling staff, and instruction in prevocational bank and business training. The educational project was to be overviewed and evaluated by two New York State Education Department Divisions, the Division of Continuing Education and the Division of Evaluation.

EDL/McGraw-Hill agreed to staff and operate three training periods of instruction, each of thirteen weeks duration, for approximately 160 students per training period. Additionally, there was to be a two-week special remediation period following each thirteen-week training period for those students deemed not ready for the GED examination. Pre-hire tests and evaluation reports were to be submitted to AIB by the hiring banks. AIB and its consortium banks were to select the prospective students for participation in the program according to the following criteria:

- a. That they meet individual member bank criteria.
- b. That they fall into that category described as "hardcore" by the U.S. Department of Labor JOBS definition.
- c. That they attain a minimum of sixth-grade achievement level as measured by a standardized test or tests.

The educational program developed by EDL/McGraw-Hill for these students is as follows: Approximately six hours each day were to be devoted to academic training. Each student would receive instruction in critical reading, mathematics, and English. Instruction in the critical reading class included the development of skills that would aid students in interpreting reading materials in the natural sciences, social studies, and literature. One period each day was to be spent in the EDL/McGraw-Hill *Learning 100/Reading 300* communication skills laboratory where students could develop or extend their present skills through the use of EDL/McGraw-Hill instrumentation such as the Aud-X, Tach-X, Controlled Reader, Skimmer, and tape player, and a wide variety of interrelated materials. In addition, AIB would provide a World of Work class to prepare students for bank employment.

EDL/AIB Program Staff

The EDL/McGraw-Hill project manager, the AIB executive director, the AIB project director, the assistant director of the Rochambeau Adult Basic Education Center at White Plains, New York, and several members of the EDL/McGraw-Hill managerial staff were involved with the interviewing and selection of program staff. The staff recruited consisted of a project director, a reading laboratory supervisor, two reading laboratory specialists, two reading laboratory aides, and eight instructors. Of the eight instructors, two taught math, two taught English, and four taught critical reading in the content areas of the natural sciences, social studies, and literature.

During the first training period, the teachers (eight classroom instructors and two reading laboratory specialists) ranged in age from twenty-three to thirty-eight years, and eight of the ten teachers were female. Seven of the ten teachers hold bachelor's degrees, one holds a master's degree and two have had some college courses. Most of the teachers have had experience working with culturally disadvantaged adults or young people.

The project director had earned his master's degree and was working on a doctorate. He had held a position as a Job Corps director before coming to the EDL/AIB program. The laboratory supervisor had obtained his B.A. and had completed three-quarters of the required courses for a master's in social work. He had previously worked for the Peace Corps and VISTA.

During the second training period there were changes in personnel: one at the administrative level, three at the teaching level, and one at the paraprofessional level.

There were no changes in personnel during the third training session.

Teacher Training

All staff went through a four-week training program at the Rochambeau ABE Center in White Plains, New York. The goals of the training period were:

1. To develop an understanding of a comprehensive laboratory approach to GED instruction.
2. To develop expertise with media.
3. To develop an understanding of the value of a multimedia approach to educating the disadvantaged.
4. To develop expertise in individualizing instruction.
5. To develop techniques in critical reading instruction applicable to this target population.

The first week, all staff observed classes and received instruction in areas of specialization – critical reading, math, reading lab, and English. All received instruction in developing test-taking techniques and teaching reading in the content areas.

The second week, staff began preparation of detailed curricula and instructional lesson plans in specialized areas. Plans were analyzed for content and methodology by the Rochambeau staff.

The third week, under supervision of the Rochambeau staff, the AIB staff demonstrated and executed plans in specialized areas. AIB staff also prepared instructional prescriptions for selected students, utilizing diagnostic and achievement test data.

The fourth week, staff were provided with a group experience in team-building and communication skills. Preparation of instructional setting and simulated class activities were monitored by the Rochambeau staff. Members of the Rochambeau staff were present at the EDL/AIB site to provide assistance during the first week of the program. Consultant follow-up by Rochambeau staff was provided on request for approximately four months.

Before the four-week interning program at Rochambeau, all staff attended a two-day EDL/McGraw-Hill workshop. The basic goals of this workshop were to describe the purpose and goals of the program, familiarize the attendees with the structure and philosophy of the GED program, and develop avenues of interaction between teachers and laboratory personnel. All attendees were oriented in the theory of a systems approach to the development of the communication skills, with emphasis on the development of the reading skills. Attendees were given an intensive session in testing and placement procedures as well as sessions devoted to the philosophy and operation of the EDL/McGraw-Hill systems – *Learning 100* and *Reading 300*.

The replacement teachers assigned during the second training period were trained by the EDL/AIB staff.

Schedule of Instruction

Each class met for approximately twenty-eight and one-half hours of instruction per week scheduled as follows:

- Approximately six hours of mathematics instruction.
- Approximately six hours of English instruction.
- Approximately six hours of critical reading instruction.
- Approximately six hours of learning laboratory instruction.
- Approximately four and one-half hours of World of Work.

Training Periods I, II, and III — November 4, 1970, Through September 22, 1971

Description of the Sample

Prior to acceptance into the training program, the *New York State Minimum Competency Test* was administered to each applicant. A score of 26 or above qualified the applicant for entrance into the program (a score of 40 was perfect). Exceptions were made in cases where an applicant's score on the *New York State Minimum Competency Test* was below 26 but his personal interview was very promising. All final decisions pertaining to the acceptance of applicants were made by the American Institute of Banking staff.

A total of 485 students were accepted: 194 students were accepted into the first training period, 150 into the second training period, and 141 into the third training period.

Table I presents information concerning the number and per cent of students who completed the program, the number and per cent of students who were withdrawn prior to completion of the training session, and the total number of students initially accepted into the program. A small decrease in the percentage of participants who withdrew from the program occurred during the second and third training sessions, thus giving rise to an increase in the percentage of those participants who took the GED examination in those latter sessions.

TABLE I
COMPARISON OF DISTRIBUTION OF STUDENTS BY DISPOSITION
FOR TRAINING PERIODS I, II, AND III

Disposition of Students	Training Period						Total	
	I		II		III		N	%
	N	%	N	%	N	%	N	%
Completed Program and Took GED Examination	141	72	113	75	110	78	364	76
Completed Program, Did Not Arrive for GED Examination	4	2	2	1	1	1	7	1
Completed Program, Took Partial GED Examination	1	1	0	0	0	0	1	0
Withdrew, Did Not Take GED Examination	46	24	31	21	29	20	106	22
Withdrew, Took GED Examination	2	1	4	3	1	1	7	1
Total Number of Students Initially Accepted Into Program	194	100	150	100	141	100	485	100

Table II summarizes the reasons for withdrawal of students from each of the three training sessions. The major reason for participants leaving the program in all three training periods was excessive absence or tardiness.

TABLE II
COMPARISON OF REASONS FOR STUDENTS LEAVING THE PROGRAM
FOR TRAINING PERIODS I, II, AND III

Reason for Leaving	Training Period							
	I		II		III		Total	
	N	%	N	%	N	%	N	%
Excessive Absence or Tardiness	23	48	10	29	10	34	43	38
Falsification of Records	9	19	4	11	1	3	14	12
Resigned	6	13	0	0	1	3	7	6
Medical	2	4	6	17	0	0	8	7
Personal	5	10	4	11	4	14	13	11
Poor Performance	0	0	3	9	0	0	3	3
Poor Conduct	2	4	0	0	1	3	3	3
Drugs	0	0	2	6	0	0	2	2
No Reason Given	1	2	6	17	13	43	20	18
TOTAL	48	100	35	100	30	100	113	100

In comparing the attendance and tardiness for participants in all three training sessions, Table III indicates an increase in the percentage of days attended and a decrease in the percentage of days tardy for training sessions II and III compared to session I. Holidays that occurred during the sessions account for the differences in total days scheduled for each training period.

TABLE III
COMPARISON OF ATTENDANCE AND TARDINESS
FOR TRAINING PERIODS I, II, AND III

	Total Days Scheduled	Mean Days		Mean Days	
		Attended	%	Tardy	%
TRAINING PERIOD I	60	55.14	92	7.68	12
TRAINING PERIOD II	66	62.62	95	2.96	4
TRAINING PERIOD III	67	63.63	95	3.92	5

During the initial interview, each student completed a demographic questionnaire issued by the New York State Education Department. Comparisons of participants' demographic characteristics for the three training sessions are presented in Tables IV through XV. The twelve characteristics included are as follows: Age (Table IV); Sex (Table V); Marital Status (Table VI); Children at Home (Table VII); Citizenship (Table VIII); Race (Table IX); Location of Major School Attendance (Table X); Gainful Employment (Table XI); Language Spoken at Home (Table XII); Years of Formal Schooling (Table XIII); Year of Most Recent Employment (Table XIV); and Type of Work Employed in for Longest Period of Time (Table XV). An examination of Tables IV through XV indicates that the distributions of students according to demographic characteristics were essentially similar for all three training periods.

TABLE IV
COMPARISON OF DISTRIBUTION OF STUDENTS BY AGE
FOR TRAINING PERIODS I, II, AND III

Age in Years	Training Period							
	I		II		III		Total	
	N	%	N	%	N	%	N	%
17 – 19	85	60	78	67	67	61	230	63
20 – 24	35	25	22	19	28	26	85	23
25 – 29	9	6	8	7	5	4	22	6
30 – 34	7	5	4	3	2	2	13	4
35 – 39	1	1	1	1	2	2	4	1
40 – 44	4	2	1	1	0	0	5	1
45 – 49	0	0	3	2	1	1	4	1
50+	1	1	0	0	0	0	1	0
No Response	0	0	0	0	5	4	5	1
TOTAL	142	100	117	100	110	100	369	100

TABLE V
COMPARISON OF DISTRIBUTION OF STUDENTS BY SEX
FOR TRAINING PERIODS I, II, AND III

Training Period								
Sex	I		II		III		Total	
	N	%	N	%	N	%	N	%
Male	42	30	39	33	37	34	118	32
Female	100	70	78	67	73	66	251	68
TOTAL	142	100	117	100	110	100	369	100

TABLE VI
COMPARISON OF DISTRIBUTION OF STUDENTS BY MARITAL STATUS
FOR TRAINING PERIODS I, II, AND III

Marital Status	Training Period							
	I		II		III		Total	
	N	%	N	%	N	%	N	%
Married/Living with Spouse	21	15	26	22	25	23	72	19
Married/Not Living with Spouse	18	13	9	8	10	9	37	10
Single	103	72	80	68	70	64	253	69
No Response	0	0	2	2	5	4	7	2
TOTAL	142	100	117	100	110	100	369	100

TABLE VII
COMPARISON OF DISTRIBUTION OF STUDENTS BY CHILDREN AT HOME
FOR TRAINING PERIODS I, II, AND III

Children at Home	Training Period							
	I		II		III		Total	
	N	%	N	%	N	%	N	%
None	61	43	42	36	34	31	137	37
One	32	23	26	22	31	29	89	24
Two	22	15	20	17	13	12	55	15
Three	16	11	15	13	9	8	40	11
Four	4	3	4	3	5	4	13	4
Five or More	6	4	9	8	13	12	28	7
No Response	1	1	1	1	5	4	7	2
TOTAL	142	100	117	100	110	100	369	100

TABLE VIII
COMPARISON OF DISTRIBUTION OF STUDENTS BY CITIZENSHIP
FOR TRAINING PERIODS I, II, AND III

Citizenship	Training Period							
	I		II		III		Total	
	N	%	N	%	N	%	N	%
Native	74	52	86	74	75	69	235	64
Native Puerto Rican	18	13	21	18	24	22	63	17
Naturalized	1	1	4	3	1	1	6	1
Alien	2	1	6	5	5	4	13	4
No Response	47	33	0	0	5	4	52	14
TOTAL	142	100	117	100	110	100	369	100

TABLE IX
COMPARISON OF DISTRIBUTION OF STUDENTS BY RACE
FOR TRAINING PERIODS I, II, AND III

Race	Training Period							
	I		II		III		Total	
	N	%	N	%	N	%	N	%
White	10	7	22	19	15	14	47	13
Black	64	45	66	57	57	52	187	51
Other	26	18	26	22	27	24	79	21
No Response	42	30	3	2	11	10	56	15
TOTAL	142	100	117	100	110	100	369	100

TABLE X
COMPARISON OF DISTRIBUTION OF STUDENTS
BY LOCATION OF MAJOR SCHOOL ATTENDANCE
FOR TRAINING PERIODS I, II, AND III

Location of Major School Attendance	Training Period							
	I		II		III		Total	
	N	%	N	%	N	%	N	%
Northeast	114	81	105	91	89	81	308	83
Middle West	2	1	0	0	0	0	2	1
South	15	11	6	5	9	8	30	8
Far West	0	0	0	0	0	0	0	0
Puerto Rico	3	2	3	2	1	1	7	2
Other	6	4	3	2	6	6	15	4
No Response	2	1	0	0	5	4	7	2
TOTAL	142	100	117	100	110	100	369	100

TABLE XI
COMPARISON OF DISTRIBUTION OF STUDENTS
EVER GAINFULLY EMPLOYED
FOR TRAINING PERIODS I, II, AND III

Gainful Employment	Training Period							
	I		II		III		Total	
	N	%	N	%	N	%	N	%
Yes	117	82	100	86	88	80	305	83
No	24	17	14	12	17	16	55	15
No Response	1	1	3	2	5	4	9	2
TOTAL	142	100	117	100	110	100	369	100

TABLE XII
COMPARISON OF DISTRIBUTION OF STUDENTS
BY LANGUAGE SPOKEN AT HOME
FOR TRAINING PERIODS I, II, AND III

Language Spoken at Home	Training Period							
	I		II		III		Total	
	N	%	N	%	N	%	N	%
English	99	70	83	71	74	67	256	69
Spanish	9	6	12	10	17	16	38	10
Other	2	1	0	0	2	2	4	1
English/Spanish	25	18	16	14	0	0	41	11
English/Other	4	3	5	4	12	11	21	6
English/Spanish/Other	1	1	1	1	0	0	2	1
No Response	2	1	0	0	5	4	7	2
TOTAL	142	100	117	100	110	100	369	100

TABLE XIII
COMPARISON OF DISTRIBUTION OF STUDENTS
BY YEARS OF FORMAL SCHOOLING
FOR TRAINING PERIODS I, II AND III

Years of Formal Schooling	Training Period							
	I		II		III		Total	
	N	%	N	%	N	%	N	%
Six Years	0	0	1	1	0	0	1	0
Seven Years	0	0	2	2	1	1	3	1
Eight Years	6	4	1	1	5	4	12	3
Nine Years	16	11	16	14	9	8	41	11
Ten Years	62	44	48	41	37	34	147	40
Eleven Years	54	38	44	37	45	41	143	39
Twelve Years	3	2	4	3	8	8	15	4
Twelve Years Plus	1	1	0	0	0	0	1	0
No Response	0	0	1	1	5	4	6	2
TOTAL	142	100	117	100	110	100	369	100

TABLE XIV
COMPARISON OF DISTRIBUTION OF STUDENTS
BY YEAR OF MOST RECENT EMPLOYMENT
FOR TRAINING PERIODS I, II, AND III

Year of Most Recent Employment	Training Period							
	I		II		III		Total	
	N	%	N	%	N	%	N	%
1970	87	61	83	71	75	69	245	66
1969	26	18	9	8	8	7	43	12
1968	4	3	4	3	2	2	10	3
1967	2	1	0	0	2	2	4	1
1966	0	0	2	2	0	0	2	1
1960	1	1	0	0	0	0	1	0
1955 – 1959	0	0	1	1	0	0	1	0
Before 1955	0	0	1	1	0	0	1	0
No Response	22	16	17	14	23	20	62	17
TOTAL	142	100	117	100	110	100	369	100

TABLE XV
COMPARISON OF DISTRIBUTION OF STUDENTS
BY TYPE OF WORK EMPLOYED IN FOR LONGEST PERIOD OF TIME
FOR TRAINING PERIODS I, II, AND III

Type of Work	Training Period							
	I		II		III		Total	
	N	%	N	%	N	%	N	%
Housewife	0	0	1	1	1	1	2	1
Clerical	62	44	36	31	33	30	131	36
Domestic	1	1	0	0	0	0	1	0
Sales	16	11	17	14	2	2	35	9
Service Trades	6	4	2	2	1	1	9	2
Skilled Labor	8	6	3	2	3	3	14	4
Semiskilled	8	6	9	8	32	28	49	13
Unskilled	16	11	33	28	13	12	62	17
Other	3	2	0	0	3	3	6	2
No Response	22	15	16	14	22	20	60	16
TOTAL	142	100	117	100	110	100	369	100

Methods and Instruments of Evaluation

The testing schedule for each training session is presented in Table XVI. Note that during the three training sessions different levels and forms of the *California Achievement Tests* and *Iowa Tests of Educational Development* were administered. In training period II rescheduling of the posttest *California Achievement Tests* allowed for more accurate measurement of educational growth, and an additional form of the *Iowa Tests of Educational Development* was included to aid as a basis on which instructional prescription could be made. During training period III refinement of diagnostic techniques was accomplished through the inclusion of a test which had not previously been used in the program and use of a lower level of a test which had previously been used. Students were given varied testing experiences during each of the training periods in an effort to develop test-taking endurance and expertise. The results of the *Iowa Tests of Educational Development* administered during the eleventh and twelfth weeks of the training periods were used to determine which students were to take the GED examination at the end of thirteen weeks of instruction and which students would benefit from an additional two weeks of instruction.

TABLE XVI
TESTING SCHEDULE
FOR TRAINING PERIODS I, II, AND III

Week of Program	Training Period I	Training Period II	Training Period III
Prior to Instruction	NYS Minimum Competency Test	NYS Minimum Competency Test	NYS Minimum Competency Test
First Week	California Achievement Tests, Form W, Advanced Level	California Achievement Tests, Form W, Advanced Level	California Achievement Tests, Form W, Jr. High Level
Sixth Week			Iowa Tests of Educational Development, SRA Assessment Survey, Form Y-5, Grades 9-12
Seventh Week		Iowa Tests of Educational Development, Form Y-4, Grades 9-12	
Eighth Week			Iowa Tests of Educational Development, Form Y-4, Grades 9-12
Ninth Week	California Achievement Tests, Form Y, Advanced Level		
Eleventh Week	Iowa Tests of Educational Development, Form Y-4, Grades 9-12		
Twelfth Week		Iowa Tests of Educational Development, Form X-4, Grades 9-12	Iowa Tests of Educational Development, Form X-4, Grades 9-12
Thirteenth Week		California Achievement Tests, Form Y, Advanced Level	

During the last week of the program, students in training sessions I and III were asked to complete an opinion questionnaire which requested their reactions to the course. Questionnaires were summarized by EDL/McGraw-Hill Research Department personnel. Descriptive information and test scores were analyzed at Grumman Data Systems Corporation using selected Biomedical Computer Programs.

Results of Statistical Analyses

Table XVII presents the mean scores, minimum scores, and maximum scores for the *New York State Minimum Competency Test* and the *General Educational Development Tests*. The mean scores on the *New York State Minimum Competency Test* (basically a reading test), for training sessions I, II, and III were very similar, indicating that the reading ability of the participants in all three sessions was essentially similar at the beginning of each session.

The GED examination consists of five subtests (refer to Table XVII). To pass the GED examination, a minimum score of 35 for each subtest and a minimum total score of 225 is required. For training sessions II and III, the mean scores on each GED subtest showed an increase. The mean scores, and minimum and maximum scores for the total GED also showed an increase from training sessions I through III.

TABLE XVII
COMPARISON OF MEAN SCORES ATTAINED ON THE NEW YORK STATE
MINIMUM COMPETENCY TEST AND THE GENERAL EDUCATIONAL
DEVELOPMENT TESTS BY AIB STUDENTS FOR
TRAINING PERIODS I, II, AND III

Variable	N	Mean Score	Minimum Score	Maximum Score
New York State Minimum Competency Test				
TRAINING PERIOD I	142	33.04	18	40
TRAINING PERIOD II	114	33.88	25	40
TRAINING PERIOD III	104	33.37	26	40
General Educational Development Tests				
Correctness and Effectiveness of Expression				
TRAINING PERIOD I	140	44.05	27	65
TRAINING PERIOD II	117	46.11	7	62
TRAINING PERIOD III	110	47.21	29	66
Interpretation of Reading Materials in the Social Studies				
TRAINING PERIOD I	140	44.77	27	62
TRAINING PERIOD II	117	46.76	33	65
TRAINING PERIOD III	110	46.23	27	65
Interpretation of Reading Materials in the Natural Sciences				
TRAINING PERIOD I	140	45.25	28	61
TRAINING PERIOD II	117	47.27	33	60
TRAINING PERIOD III	110	47.91	32	71
Interpretation of Literary Materials				
TRAINING PERIOD I	140	45.58	28	63
TRAINING PERIOD II	117	46.71	30	66
TRAINING PERIOD III	110	48.10	37	68
General Mathematical Ability				
TRAINING PERIOD I	140	43.79	16	58
TRAINING PERIOD II	117	45.72	30	58
TRAINING PERIOD III	110	47.18	29	61
GED Total				
TRAINING PERIOD I	140	223.54	170	293
TRAINING PERIOD II	117	232.91	185	298
TRAINING PERIOD III	110	236.63	190	311

Indicated in Table XVIII are the number and per cent of participants who took and passed the GED examination and those who took and failed the GED examination. It is interesting to note that for each succeeding training session the percentage of students who passed the GED increased. Forty-six per cent of the students from the first session passed; fifty-eight per cent passed from the second session; and sixty-three per cent passed from the third session.

TABLE XVIII
COMPARISON OF NUMBERS OF STUDENTS
WHO PASSED AND FAILED THE GED EXAMINATION
FOR TRAINING PERIODS I, II, AND III

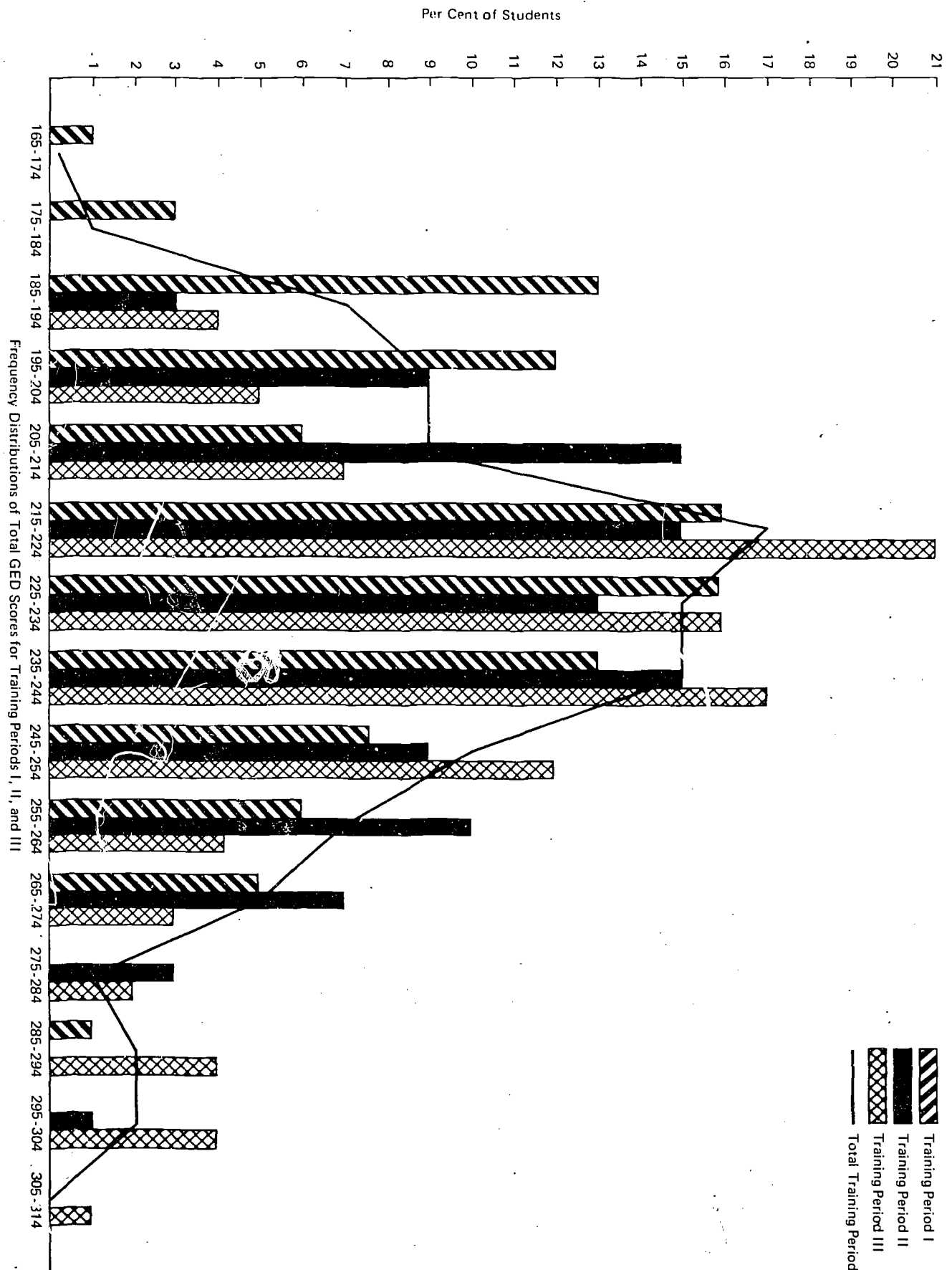
	Training Period							
	I		II		III		Total	
	N	%	N	%	N	%	N	%
Passed the GED Exam.	65	46	68	58	69	63	202	55
Failed the GED Exam.	77	54	49	42	41	37	167	45
TOTAL	142*	100	117*	100	110	100	369	100

*These totals include students who took the GED examination although they were withdrawn from the program after completing more than half of the training period.

Table XIX and Figure 1 present the frequency distributions of total GED scores for training periods I, II, and III, as well as for the total sample involved in the program. It can be seen that, in general, students in each progressive training period achieved at higher levels than did students in each previous training period.

TABLE XIX
FREQUENCY DISTRIBUTIONS OF TOTAL GED SCORES
FOR TRAINING PERIODS I, II, AND III

Raw Score Range	Training Period I		Training Period II		Training Period III		Total	
	N	%	N	%	N	%	N	%
165 - 174	2	1	0	0	0	0	2	0
175 - 184	4	3	0	0	0	0	4	1
185 - 194	18	13	3	3	4	4	25	7
195 - 204	17	12	11	9	6	5	34	9
205 - 214	9	6	17	15	8	7	34	9
215 - 224	22	16	17	15	23	21	62	17
225 - 234	22	16	15	13	17	16	54	15
235 - 244	19	13	18	15	19	17	56	15
245 - 254	12	8	11	9	13	12	36	10
255 - 264	8	6	12	10	5	4	25	7
265 - 274	7	5	9	7	3	3	19	5
275 - 284	0	0	3	3	2	2	5	1
285 - 294	2	1	0	0	4	4	6	2
295 - 304	0	0	1	1	5	4	6	2
305 - 314	0	0	0	0	1	1	1	0
TOTAL	142	100	117	100	110	100	369	100



Correlations were run between the various tests and the GED examinations administered during the training periods to determine which test results related most highly to results on the GED examination. It was found that the *New York State Minimum Competency Test* and the *California Achievement Tests*, Reading subtests, correlated very highly (.60 and above) with the GED total score in all three training periods.

An ex post facto examination of scores attained on the *New York State Minimum Competency Test*, administered before entry into the instructional program, and scores on the GED examination, attained at the end of the instructional program, revealed that a high percentage of students who scored high on the *New York State Minimum Competency Test* passed the GED examination. Table XX indicates the percentage of students passing the GED compared to their range of scores on the Minimum Competency Test. It is interesting to note that twenty to twenty-five per cent of those students scoring in the lower ranges did pass the GED examination and that at the higher ranges seventy-seven and ninety-six per cent passed the GED examination.

In instances where Minimum Competency Test scores indicate a low probability of success, the selection procedure should take into consideration factors such as motivation, personal drive, and need for employment, assigning sufficient weight to these factors to partially offset initial low scores, thus improving the selection process. The data also indicate that consideration of initial test scores could be of value in counseling and designing special instructional sequences for those students whose scores fall into the lower ranges.

TABLE XX
PER CENT OF STUDENTS PASSING OR FAILING THE GED
BASED ON PERFORMANCE ON THE NEW YORK STATE
MINIMUM COMPETENCY TEST*

N.Y. State Min. Comp. Score	Percentage Failing	Percentage Passing
38 - 40	4	96
35 - 37	23	77
32 - 34	52	48
29 - 31	75	25
26 - 28	80	20
25 and below	100	0

*These predictions are based on performance of AIB students on the *New York State Minimum Competency Test* and the GED examination.

The *California Achievement Tests*, Advanced Level, Form W, were administered during the first week of training periods I and II. (See Table XVI.) Thirteen to fifteen weeks of instruction followed. The per cent of students who passed the GED in each of these training periods was compared. Students were grouped according to their attained scores on the *California Achievement Tests*, Reading subtest. This information is shown in Table XXI. In training sessions I and II, 100 per cent of the students who scored 80 or more on the *California Achievement Tests*, Reading subtest, passed the GED examination. In training session I, forty-six per cent of the participants who scored between 50 and 59 on the *California Achievement Tests*, Reading subtest, passed the GED examination. Sixty-two per cent of the participants in training session II

who scored between 50 and 59 on the *California Achievement Tests*, Reading subtest, passed the GED examination and in combining those participants in training sessions I and II, a total of fifty-four per cent who scored in the 50 to 59 range on the *California Achievement Tests*, Reading subtest, passed the GED examination. Note that the grade equivalent for this particular range of scores is 8.5 to 9.4.

TABLE XXI
PER CENT OF STUDENTS PASSING THE GED
BASED ON PERFORMANCE ON THE PRETEST
CALIFORNIA ACHIEVEMENT TESTS READING SUBTEST*

CAT Reading Subtest		% Passing GED Training Period		Total
Raw Score	Grade Equivalent	I	II	
80 and above	11.4 and above	100	100	100
70 – 79	10.5 – 11.3	92	94	93
60 – 69	9.5 – 10.4	47	83	66
50 – 59	8.5 – 9.4	46	62	54
40 – 49	7.5 – 8.4	12	25	18
30 – 39	6.5 – 7.4	9	20	14
29 and below	6.4 and below	0	0	0

*These percentages are based on performance of AIB students on the Advanced Level of the CAT Reading subtest and the GED examination during training periods I and II.

Subjective Evaluation

During the final week of training periods I and III a questionnaire submitted to the students requested their responses to how the program helped them most and whether they intended to continue their educations. Table XXII summarizes students' opinions as to how the program helped them most. Learning new things and recalling previous knowledge, improving reading ability, and GED preparation were reasons most often mentioned by students in both training periods.

TABLE XXII
COMPARISON OF STUDENTS' OPINIONS OF HOW THE PROGRAM
HELPED THEM MOST FOR TRAINING PERIODS I AND III

Comment	Training Period			
	I		III	
	N	%	N	%
Learning New Things and Recalling Previous Knowledge	33	20	27	19
Improving Reading Ability	33	20	18	12
GED Preparation	25	16	15	11
Improving English and Vocabulary Usage	24	15	6	4
Improving Math Ability	22	13	16	11
Realizing the Importance of an Education	7	0	15	11
Gaining Incentive to Further Education and for Future Success	10	6	9	6
Improving Attitude	7	4	18	12
Increasing Learning Ability	0	0	6	4
Understanding People	4	2	5	4
Qualifying for a Job	2	1	6	4
Pointing Out Weaknesses	1	1	0	0
Improving Spelling Ability	1	1	0	0
Making New Friends	1	1	0	0
Taking Exams	0	0	1	1
Understanding Current Events	0	0	1	1

The students also indicated their educational plans for the future. Table XXIII shows that most of the students expressed intentions to continue their educations. Only twelve per cent of the students in training period I and seven per cent of the students in training period III were definite about not continuing their educations.

TABLE XXIII
COMPARISON OF STUDENTS' FUTURE EDUCATIONAL PLANS
FOR TRAINING PERIODS I AND III

Future Educational Plans	Training Period			
	I		III	
	N	%	N	%
Students Intend to Continue Their Education	74	63	81	85
Students Do Not Intend to Continue Their Education	14	12	7	7
Students Are Undecided About Continuing Their Education	14	12	7	7
Students Would Eventually Like to Continue Their Education	7	6	1	1
Students Did Not Respond to This Question	9	7	0	0

Summary and Conclusions

In summary, a total of 485 students were initially accepted into the training program. Three hundred seventy-two students (77%) completed the program. One hundred thirteen students (23%) were withdrawn from the program. The major reason for participants leaving the program was excessive absence or tardiness.

The distributions of students according to demographic characteristics were similar for all three training periods. The mean scores on the *New York State Minimum Competency Test* (the qualifying examination) for the three training sessions were also similar. From these data, it might be assumed that the populations for each of the sessions were essentially the same.

For each succeeding training session, the percentage of students who passed the GED examination increased. Forty-six per cent of the students from the first training session passed; fifty-eight per cent passed from the second session; and sixty-three per cent passed from the third session.

An examination of the frequency distributions of total GED scores for training periods I, II, and III show that students' scores improved in each successive training period. Twenty-nine per cent of the students from the first training session scored 204 or below on the GED examination fourteen per cent scored at that level from the second training session; and nine per cent scored 204 or below from the third session.

A look at the numbers of students who attained scores of 265 or above indicates that the per cent of students increased from six per cent to eleven per cent to fourteen per cent respectively for the three training sessions.

As indicated by the comparison of demographic characteristics and the *New York State Minimum Competency Test* scores, no initial differences existed among the three samples. The same training site was used and the training personnel remained essentially the same. Therefore, the improvements in reading scores and increases in the GED scores that occurred may be attributed to improved diagnosis of learning deficiencies, prescriptive techniques, and shifts in instructional emphasis.

Due to the experience gained by using various testing procedures, the identification and diagnosis of learning deficiencies became more precise with each training session. With the increased ability to identify specific needs of the participants, the instructors were better able to prescribe on an individual or small-group basis.

The students in responding to a questionnaire, in general, agreed that the program helped them. The majority stated that they were helped most in learning new things and recalling previous knowledge, in reading, and in GED preparation. The training experience seemed to be a second chance for many. Most students expressed intentions to continue their educations.

For the bank trainees, there is the benefit of the knowledge that they are learning, the increase in their self-confidence, and the acquisition of high school equivalency diplomas so that they will have the basis for promising careers within the banking industry. For the banks, there is the benefit of the career potential developed by the training program. With the results achieved in the AIB project, EDL/McGraw-Hill feels that the basic concept of its training program can be specifically tailored to fit the requirements of any industry or business in any urban area with similar problems.

A detailed report including all analyses performed for each of the training periods, plus a comparison of the three training periods, is available from the EDL/McGraw-Hill Research Department. It is entitled, "Evaluation of the Educational Developmental Laboratories/American Institute of Banking High School Equivalency Program for Bank Trainees."

APPENDIX

INSTRUCTIONAL MATERIALS USED IN THE EDL/AIB PROGRAM

Math Materials Used in the EDL/AIB Program

Publisher	Material
Addison-Wesley Pub. Co.	Basic Math – A Problem Solving Approach
Amsco School Pub., Inc.	Preliminary Math – Review Text
Cambridge Book Co., Inc.	Introduction to Modern Math 2
Cowles Educational Books, Inc.	General Mathematics Ability
Educational Developmental Labs.	Arithmetic Programs Filmstrips and Materials
Encyclopaedia Britannica Inc.	Preparing For Algebra
General Learning Corp.	Basic Algebra
	Geometry
	Math for Home and Business
	Problem Solving Skills
	The Theory of Numbers
Houghton-Mifflin	Modern Geometry
Science Research Assoc., Inc.	Computational Skills Kits
	Modern Mathematics for Achievement 1st course
	Modern Mathematics for Achievement 2nd course
Steck-Vaughn Co.	Algebra Book I
	Working With Numbers Refresher Course

English Materials Used in the EDL/AIB Program

Publisher	Material
Amsco School Pub., Inc.	English Language Arts Int. Level Workbook Lessons in Reading Comprehension Review Text in Comprehension English
Bantam Books	EDL Libraries B-MN, B-KL, B-IJ, and B-GH
Barnell Loft, Inc.	Using the Context Levels E and F Getting the Facts Levels E and F Following Directions Levels E and F
Cambridge Book Co.	Increase Your Vocabulary I and II
Cowles Educational Books, Inc.	Correctness and Effectiveness in Expression
Dell Pub. Co.	Roget's Thesaurus
Economy Co.	Keys to Good English Grade 8 Keys to English Mastery Grade 10 Keys to English Mastery Grade 12
General Learning Corp.	English Usage Spelling Understanding Literature
Harcourt Brace Jovanovich	English 3200 English 2600
G. & C. Merriam Co.	Webster's 7th New Collegiate Dictionary
Reader's Digest	Grow In Word Power
Simon & Schuster	Webster Paperback Dictionary

Non-Lab Reading Materials Used in the EDL/AIB Program

Publisher	Material
Appleton-Century Croft	Improving Reading Ability
Cambridge Book Co., Inc.	Unit Review of General Science
Cowles Educational Books, Inc.	Reading Comprehension in Literature Reading Comprehension in the Natural Sciences Reading Comprehension in the Social Sciences
General Learning Corp.	Biology I and II Chemistry Citizenship Fundamentals of Physical Science Physics Skillful Reading Social Studies I and II
Houghton-Mifflin	Improvement of College Reading
J.B. Lippincott Co.	Reading for Meaning Grades 9, 10, 11, and 12
McGraw-Hill Book Co.	Critical Reading Improvement Reading for the Main Idea Reading for Significant Facts Reading for Supporting Details Reading to Discover Organization
Prentice Hall	Be a Better Reader Books I, II, III, IV, V, and VI Be a Better Reader Foundation A, B, and C
Reader's Digest	Advanced Reading Skill Practice
Science Research Assoc., Inc.	Reading for Understanding Labs Jr. Reading for Understanding Labs Gen.
Rand McNally and Co.	Maps Paperback World Atlas
Scott Foresman Co.	Reading Kit – Tactics I and II U.S. in Literature

Lab Reading Materials Used in the EDL/AIB Program

Publisher	Material
Behavioral Research Labs	Why Work Kit
Biometrics, Inc.	EDL/Biometrics Reading Eye II Ensemble
Educational Developmental Labs.	Aud-X Mark 3
	Controlled Reader
	Processing Motor
	Tach-X
	Flash-X
	Controlled Reader Film and Study Guides
	Tach-X Film and Workbooks
	Aud-X Film, Records, and Workbooks
	Reading Efficiency Checks
	Instructor's Manuals
	Flash-X Discs
	Listen and Read Series
	Study Skill Tests
	Word Values Series
	Skimming and Scanning Materials
Field Enterprises, Inc.	World Book
Grolier, Inc.	Reading Attainment System Level 2
Jamestown Pub., Inc.	Black College Reading Skills Series
Random House	Library Dictionary
Science Research Assoc., Inc.	Better Reading Books I, II, III
	Reading for Understanding Gen.
	Reading Accelerator Model III
	Modern Library Classics and Selected Paperbacks